

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A process for automatically controlling a thickness of an extruded film, comprising:

measuring thickness profile values of the extruded film with a thickness-measuring probe that is moved along a surface of the film substantially perpendicular (x) to a conveying direction (z) of the extruded film, the thickness-measuring probe recording for each measuring cycle (MZ) a thickness profile (P) of the film at least across parts of an expansion of the film perpendicular (x) to the conveying direction (z);

transmitting the measured values to a control unit;

storing the transmitted measured values in a storage unit;

providing statistical values of the film thickness using a computer by taking into account the measured values or information derived from the measured values using a definite number of the measuring cycles (MZ);

determining deviations in the statistical values of the film thickness from a target value; and

generating control commands to a device for controlling the film thickness,

such that during a predetermined time-frame at a start of the extrusion process, measured values or information derived from the measured values is made accessible to the computer for a ~~greater~~ larger number of measuring cycles than ~~is~~ a number of measuring cycles recorded by the thickness-measuring probe in a time-frame of length ~~similar to~~ associated with the predetermined time-frame during ~~a normal~~ an operation other than at the start of the extrusion process, and that

the computer takes into account the measured values while providing the statistical values,

at least a part of the measured values originating from the storage unit, which makes accessible the measured values or the information derived from the measured values to the computer,

the measured values or the information derived from the measured values originating only from measuring cycles that were recorded in another extrusion process in which the deviations in the film thickness from the target value lay within an acceptable tolerance range.

2. (Currently amended) The process pursuant to claim 1, wherein the thickness-measuring probe is moved during the predetermined time-frame at the start of the extrusion process ~~more quickly~~ along the surface of the extruded film at a faster rate than in a rate associated with the normal operation other than at the start of the extrusion process, and determines for each time unit the

measured values from ~~a~~ the larger number of measuring cycles than
~~a~~ the number of measuring cycles used in the ~~normal~~ operation
other than at the start of the extrusion process, and makes the
measured values accessible to the computer.

3. (Canceled)

4. (Previously presented) The process pursuant to claim 1,
wherein weighting factors are assigned to the measured values or
the information derived from the measured values using different
measuring cycles with which a contribution of the measured values
or of the information derived from the measured values to the
statistical values is defined.

5. (Previously presented) The process pursuant to claim 4,
wherein the weighting factors are changed at the start of the
extrusion process.

6. (Previously presented) The process pursuant to claim 1,
wherein the measured values or the information derived from the
measured values using other extrusion processes that are stored
in the storage unit are assigned to process parameters that
prevailed when the measured values were recorded.

Claim 7 (Withdrawn) Device for the automatic control of the thickness of the extruded film (8) having the following features:

- a thickness-measuring probe (12) for measuring the thickness profile of the film just extruded (8) that is moved along the surface of the film (8) substantially perpendicular (x) to the conveying direction (z) of the extruded film (8). The thickness measuring probe (12) records for each measuring cycle (MZ) a thickness profile (P) of the film (8) at least across parts of the expansion of the film (8) perpendicular (x) to its conveying direction (z),
- transmitting the measured values to a control unit (14, 15, 17),
- a storage unit (14) for recording the measured values and the information derived therefrom,
- a computer (14) for providing statistical values of the film thickness (5) taking into account measured values or information derived therefrom using a definite number of measuring cycles (MZ)
- wherein even the deviations in the statistical values of the film thickness (5) from a target value can be determined using the computer (14),
- a device (17) for generating control commands to a device for controlling the film thickness (5)

characterized in

- a computer (14) using which it is possible to take into account, during a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom using or for a greater number of measuring cycles than those recorded by the thickness-measuring probe in a time-frame of similar length during the normal operation,
- a storage unit (14) in which it is possible to store measured values or information derived therefrom using measuring cycles that were recorded in another extrusion process
- communication means between the storage unit (14) and the computer (14) that provides to the computer (14) during a predetermined time-frame at the start of the extrusion process at least a part (14) of the measured values or information derived therefrom which the computer (14) then takes into account for this time-frame.

8. (Canceled)

9. (Previously presented) The process pursuant to claim 2, wherein weighting factors are assigned to the measured values or the information derived from the measured values using different measuring cycles with which a contribution of the measured values

or of the information derived from the measured values to the statistical values is defined.

10. (Canceled)

11. (Previously presented) The process pursuant to claim 2, wherein the measured values or the information derived from the measured values using other extrusion processes that are stored in the storage unit are assigned to process parameters that prevailed when the measured values were recorded.

12. (Canceled)

13. (Currently amended) The process pursuant to claim 4, wherein the measured values or the information derived from the measured values using other extrusion processes that are stored in the storage unit are assigned to process parameters that prevailed when the measured values were recorded.

14. (Currently amended) The process pursuant to claim 5, wherein the measured values or the information derived from the measured values using other extrusion processes that are stored in the storage ~~device~~ unit are assigned to process parameters that prevailed when the measured values were recorded.